#### Indiana Frog & Toad Breeding Seasons\*

Species Name	Feb.	Mar.	Apr.	May	June	July	Aug.
Chorus Frog		_	_				
Wood Frog		_					
Spring Peeper			-				
S. Leopard Frog	- 10		_	_			
Crawfish Frog		-	-81				
N. Leopard Frog			_				
Plains Leopard			-				
American Toad			_	_	-		
Pickerel Frog			_		100		
Spadefoot Toad				_	-		
<b>Gray Treefrogs</b>	- 10		_	_	-		
Cricket Frog					_		
Fowler's Toad				_	_		
Green Frog				_	_		1
Green Treefrog					_	_	
Bullfrog	- 100	17	12.				10.0

<sup>\*</sup> Shaded areas represent the data-collection run windows for Indiana.

#### Indiana Frog & Toad Ranges

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American Toad	3				Not in lower Wabsah Valley
Bullfrog					
Chorus Frog	y.		- 6		
Cope's Gray Tree Frog					North to Muncie
Crawfish Frog					Endangered western
Cricket Frog					Rare in northern IN
Eastern Gray Tree Frog					South to Indianapolis
Fowler's Toad					
Green Frog					1
Green Tree Frog			- 1		Vanderburgh Co.
N. Leopard Frog			100		Extreme southeast
Pickerel Frog	3	3=1			Not in NW prarie & lower Webselh
Plains Leopard			100		May be extirpated
S. Leopard Frog					West-central
Spadefoot Toad					Harrison Co.
Spring Peeper					
Wood Frog					

SPECIES	CALL DESCRIPTION
American toad	Musical trill, long (10-20 seconds), high pitched
Bullfrog	Foghern
Chorus frog	Finger over the teeth of a comb
Cope's Gray treefrog	Nasally wa-a-a-a-a flute-like trill (2-3 sec), faster and harsher than the gray treefrog
Crawfish frog	Guttural sound, hogs at feeding time (endangered)
Cricket frog	Sound of metal balls clicked together
Fowler's toad	Sheep with a cold, nasally wash (1-4 sec.) iffeguard whistle
Gray treefrog	Flute-like trill, slow and melodic (3-4 sec.)
Green frog	Plucked banjo string or tight rubberband
Green treefrog	Rising cowbell, nasal queenk-queenk-queenk may repeat up to 75 times per minute
Northern leopard frog	Rattling snore, 3 seconds, heavy door slowly creaking open
Pickerel frog	Soft steady snore (1-2 sec.)
Plains leopard frog	Chuck-chuck-chuck, abrupt gutteral notes 2 or 3 per second
Southern leopard frog	Short, chuckle-like gutteral trills
Spadefoot toad	Young grow, explosive grunt
Spring peeper	Peep, peep, peep, jingle of sleigh bells
Wood frog	Duck-like guacks, hoarse low-pitched groak

## Mail Datasheets by September 1

INAMP Coordinator Division of Fish & Wildlife 402 W. Washington St., W273 Indianapolis, IN 46204

317-232-4080 www.dnr.IN.gov/fishwild/endangered







#### **Protocol**

The Indiana Amphibian Monitoring Program (INAMP) has specific guidelines that must be followed in order to participate in the program. These guidelines combined make up what is called the **Protocol.** 

This guide serves as a quick reference guide and should be taken with you when you collect data.

#### NAAMP

The North American Amphibian Monitoring Program utilizes driving routes that have been randomly selected by the national program.

Beginning in 2006, a passing score on a species identification quiz is required for participation with this program. An individual may only run one NAAMP route. Only one person will be assigned to each route.

NAAMP data collection time periods vary for each state based on the species that live there. In Indiana, we are monitoring 17 different species.

The time frames in which to collect data are called **Windows**. Within each window you will collect data one time. This process is called a **Run**. Runs must be completed when certain time and weather conditions are met.

It is up to you when you complete the run. But it **must** meet the requirements in order for the data to be valid.

NOTE: These routes MUST be approved by the state coordinator before you can collect data. Do NOT alter or change your route without prior consent from the coordinator.

Run 1: Feb. 21 - March 20. Temp. 42° and above

Run 2: April 15 - May 25. Temp. 50° and above

Run 3: June 21 - July 31. Temp. 55° and above

# FrogWatch USA (www.frogwatchusa.org)

FrogWatch USA utilizes individually selected locations as the monitoring sites. These locations are selected by the volunteer. Volunteers may register and monitor as many sites as they would like.

FrogWatch does not have a data collection time frame. However, for optimal data collection in Indiana, it is recommended that you follow the NAAMP guidelines.

It is up to you when you collect data. Data must be collected when certain time and weather conditions are met.

#### When to Collect Data

When to conduct a survey:

- · Check date
- Check forecast for favorable conditions (i.e. temps, wind)
- Is it a good frog night? (Are frogs even calling near work/home?)
- What time is sunset? Start route 30 minutes after sunset or later.

Tip: Local forecast and sunset information is available online.

http://weather.yahoo.com www.wunderground.com

### Important Equipment

• **Datasheet-** These are a *must* to record your data.

# Download NAAMP datasheets at: www.IN.gov/dnr/fishwild/nongame/nsheet.pdf

- **Pencil-** You may use a pen, but keep in mind that ink tends to run when it gets wet.
- Timer- We recommend using a digital wristwatch to monitor the exact time as well as a stop watch or kitchen timer to indicate when the time is up (5 minutes for NAAMP, 3 minutes for FrogWatch). This will allow you to focus on the frogs instead of on the clock. Please do not use watches or clocks that do not have all 60 minutes marked.
- Thermometer- It is important to record the temperature at every stop. It is recommended that you use a digital thermometer. Please do not use your automobile thermometer as your car's temperature may affect the reading.
- Wind gauge- A gauge to obtain an accurate measure of wind speeds may be helpful, but is not required.

### **Collecting Data**

#### A. Proper data collection tips:

- · Clipboard may be helpful
- Avoid clothing that rustles and may interfere with listening
- Bring along this brochure for species identification reference
- Take along your frog call recordings for reference
- You MUST get out of your car to collect data
- Turn off your car and move far enough away so car noise isn't a distraction
- · Close car doors gently
- You should NOT move more than 200 feet from your vehicle to hear the calls
- Stand away from car when recording temperature so that heat from vehicle does not interfere
- You MUST listen for the entire time required for every stop
- You do NOT need to physically be right next to the habitat. If you hear the frog or toad...record it!

#### B. Safety tips:

- Consider leaving your car dome light on to increase your visibility to traffic
- Carry a flash light and extra batteries
- Consider wearing reflective clothing

If you bring another person for safety or companionship, please avoid conversation during listening periods and record only one person's observations. The assistant might hold equipment and track the time.